

When Stakeholders Constrain or Enable Greenwashing: Evidence from Indonesia

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ABSTRACT

This study examines the effect of stakeholder pressure on corporate greenwashing behavior from the perspectives of legitimacy theory and stakeholder theory. The research aims to analyze whether different forms of stakeholder pressure, namely government pressure, environmental pressure, consumer pressure, and creditor pressure, influence firms' propensity to engage in greenwashing. This study extends the greenwashing literature by demonstrating that stakeholder pressure is not uniformly constraining, but selectively enables symbolic sustainability practices depending on the institutional source of pressure. The population of this study consists of publicly listed non-financial companies, observed over a multi-year period. Using purposive sampling, a total of 238 firm-year observations were obtained based on data availability and completeness of sustainability and financial disclosures. The study employs panel data regression with a random effects model, selected based on model specification tests. Given the presence of non-normal data distribution and autocorrelation, robust standard errors are applied to ensure reliable statistical inference, while diagnostic tests confirm the absence of heteroskedasticity and multicollinearity. The results indicate that government pressure and environmental pressure are negatively and significantly associated with greenwashing, suggesting that stronger regulatory oversight and environmental scrutiny reduce firms' reliance on symbolic sustainability disclosures. In contrast, consumer pressure exhibits a positive and significant relationship with greenwashing, implying that market-driven sustainability demands may encourage symbolic reporting when verification mechanisms are weak. Creditor pressure shows a negative but statistically insignificant effect on greenwashing. These findings suggest that stakeholder pressure does not uniformly constrain greenwashing; instead, its effectiveness depends on the source and enforcement mechanism of the pressure. Overall, this study concludes that legitimacy-seeking behavior and strategic stakeholder management play a central role in shaping corporate greenwashing practices.

Keywords: Greenwashing; Stakeholder Pressure; Legitimacy Theory; Sustainability Disclosure; Corporate Governance

INTRODUCTION

Over the past two decades, corporate sustainability has evolved from a voluntary managerial initiative into a central element of corporate accountability and governance. Firms are increasingly expected not only to generate economic value but also to demonstrate responsibility toward environmental and social stakeholders (Signori et al., 2021). This shift has been reinforced by the widespread adoption of sustainability reporting frameworks, ESG-oriented investment strategies, and regulatory initiatives encouraging or mandating environmental disclosure (Barker, 2025). Consequently, sustainability reporting has become a key mechanism through which firms communicate their environmental commitments and respond to growing societal expectations.

Despite these developments, concerns regarding the credibility of environmental disclosures have intensified. A growing body of evidence suggests that corporate sustainability claims often diverge from actual environmental performance (Delmas & Burbano, 2011). This divergence is

commonly referred to as greenwashing, defined as the practice of selectively disclosing, exaggerating, or misrepresenting environmental information to create a misleading impression of superior sustainability performance (Moodaley & Telukdarie, 2023). Greenwashing undermines stakeholder trust, distorts capital allocation, and weakens the effectiveness of sustainability governance mechanisms.

Greenwashing is particularly challenging to detect and regulate because it frequently occurs within formal compliance boundaries. Firms may adhere to reporting standards while strategically emphasizing positive narratives and obscuring negative environmental outcomes (Iazzi et al., 2025). As sustainability disclosure becomes increasingly institutionalized, firms face stronger incentives to manage impressions symbolically rather than undertake costly substantive environmental improvements (Lyon & Montgomery, 2015). Understanding the drivers of greenwashing has therefore become a critical issue in accounting, sustainability, and corporate governance research.

Existing studies have predominantly examined greenwashing from an internal governance perspective, focusing on firm-level characteristics such as board composition, ownership structure, and managerial incentives (Ma & Ahmad, 2024). While this literature provides valuable insights, it tends to overlook the broader institutional environment in which firms operate. In practice, corporate sustainability strategies are shaped not only by internal decision-making but also by pressures exerted by external stakeholders.

In this regard, stakeholder pressure represents a crucial yet underexplored determinant of greenwashing. Firms face demands from multiple stakeholder groups, including governments enforcing environmental regulations, environmental organizations and media monitoring corporate conduct, consumers expressing sustainability preferences, and creditors assessing environmental risks in financing decisions (Freeman, 1984). These stakeholders differ in their power, legitimacy, and urgency, suggesting that their influence on corporate behavior may vary significantly (Luo & Chang, 2025).

These inconsistencies highlight two important research gaps. First, stakeholder pressure is often treated as a homogeneous construct, ignoring differences across stakeholder groups and their enforcement capacities. Second, the relationship between stakeholder pressure and greenwashing is frequently assumed to be linear, overlooking the possibility of contingent or paradoxical effects, particularly in emerging market contexts where regulatory enforcement and stakeholder monitoring may be uneven (Li et al., 2022).

Accordingly, this study examines the effect of stakeholder pressure on corporate greenwashing by disaggregating stakeholder pressure into government pressure, environmental pressure, consumer pressure, and creditor pressure. By adopting an external governance perspective and employing panel data analysis, this study seeks to clarify whether stakeholder pressure constrains greenwashing or instead encourages symbolic sustainability practices. The findings are expected to contribute to the greenwashing literature, enrich legitimacy and stakeholder theories, and provide practical insights for policymakers and stakeholders seeking to enhance the credibility of sustainability reporting. This study departs from prior greenwashing research by conceptualizing stakeholder pressure not merely as a disciplinary force, but as a contingent institutional mechanism that may both constrain and enable symbolic sustainability practices. In doing so, this study positions corporate greenwashing as a strategic legitimacy response rather than a uniform compliance failure.

LITERATURE REVIEW

Legitimacy Theory

Legitimacy theory posits that organizations continuously seek to ensure that their activities are perceived as congruent with the values, norms, and expectations of the societies in which they operate. Legitimacy is considered a vital resource, as it enables firms to secure continued access to capital, markets, and social acceptance (Dowling & Pfeffer, 1975). When corporate actions diverge from societal expectations, a legitimacy gap emerges, prompting firms to adopt strategies aimed at restoring or maintaining legitimacy. In the context of environmental sustainability, legitimacy pressures have intensified due to heightened public awareness of environmental degradation,

climate change, and corporate responsibility. Firms are increasingly evaluated not only on their financial performance but also on their environmental conduct and transparency. As environmental expectations evolve, companies must continuously adapt their strategies to align with prevailing social norms (Suchman, 1995).

Legitimacy theory distinguishes between substantive and symbolic responses to legitimacy threats. Substantive responses involve genuine changes in organizational practices. In contrast, symbolic responses focus on managing perceptions through communication and disclosure without altering underlying practices. Sustainability reporting, therefore, can function either as a mechanism for accountability or as a symbolic tool for impression management (Rusu et al., 2024). Within this framework, greenwashing represents a symbolic legitimacy strategy employed when firms face environmental legitimacy pressures but perceive substantive changes as costly or risky. Firms may selectively disclose favorable information, emphasize aspirational goals, or adopt sustainability rhetoric to signal conformity with societal expectations while avoiding fundamental operational changes. Consequently, legitimacy theory provides a robust theoretical foundation for understanding why firms engage in greenwashing under external pressure.

Stakeholder Theory

Stakeholder theory provides a fundamental framework for understanding how and why firms respond to pressures arising from multiple external actors. According to this theory, firms are not solely accountable to shareholders but also to a broader set of stakeholders who can affect or are affected by corporate activities (Freeman, 1984). These stakeholders include governments, creditors, consumers, environmental groups, and the wider society, all of whom possess varying degrees of influence over corporate decision-making. A central premise of stakeholder theory is that stakeholder influence is heterogeneous rather than uniform. Kaporiri & Razavi (2021) argue that the salience of a stakeholder depends on three attributes: power, legitimacy, and urgency. Stakeholders possessing all three attributes are more likely to shape corporate behavior, whereas those lacking one or more attributes exert weaker or indirect influence. This perspective is particularly relevant in the context of sustainability, where stakeholders differ substantially in their ability to monitor, sanction, and reward firms.

In environmental and sustainability contexts, stakeholder theory suggests that firms strategically prioritize stakeholder demands based on perceived risks and benefits. Government stakeholders typically exert coercive power through regulations, enforcement mechanisms, and legal sanctions. Environmental stakeholders, such as NGOs and media organizations, rely primarily on normative and reputational power to influence corporate behavior. Consumers exert market-based pressure by rewarding or penalizing firms through purchasing decisions, while creditors apply financial pressure by incorporating environmental risks into lending decisions and credit assessments.

In this regard, greenwashing can be interpreted as a strategic stakeholder management tool. Firms may employ greenwashing to signal responsiveness to stakeholder demands while selectively allocating resources to maintain flexibility and minimize operational disruption. This strategy is particularly attractive in contexts characterized by information asymmetry, where stakeholders face difficulties in verifying the accuracy of corporate environmental claims (Lyon & Montgomery, 2015).

Greenwashing

Greenwashing refers to corporate practices that create a misleading impression of superior environmental performance through selective disclosure, exaggerated claims, or symbolic sustainability narratives (Delmas & Burbano, 2011). Rather than reflecting actual improvements in environmental outcomes, greenwashing often serves as a strategic communication tool designed to influence stakeholder perceptions. The concept of greenwashing is closely linked to the notion of decoupling, in which formal policies or disclosures are disconnected from actual organizational practices. As sustainability reporting becomes increasingly institutionalized, firms may comply with reporting requirements in form while failing to implement substantive environmental improvements in practice (Tariq, 2025). This decoupling allows firms to maintain legitimacy

without incurring the full costs of environmental compliance.

Prior research has identified various forms of greenwashing, ranging from vague or unverifiable environmental claims to inconsistencies between reported sustainability achievements and observed environmental performance (Moodaley & Telukdarie, 2023). Greenwashing is particularly prevalent in contexts characterized by information asymmetry, limited verification mechanisms, and weak enforcement. In such settings, stakeholders may struggle to assess the credibility of corporate environmental disclosures, creating opportunities for symbolic compliance. Greenwashing poses significant risks to sustainability governance. By distorting information available to stakeholders, greenwashing undermines trust, weakens market discipline, and reduces the effectiveness of regulatory and voluntary sustainability initiatives (Zervoudi et al., 2025). As a result, identifying the institutional and stakeholder-level factors that constrain or enable greenwashing has become a critical research priority.

Stakeholder Pressure

Stakeholder pressure refers to the demands, expectations, and constraints imposed on firms by actors who can affect or are affected by corporate activities (Freeman, 1984). Stakeholders differ in their ability to influence corporate behavior based on their power, legitimacy, and urgency (Kapiriri & Razavi, 2021). These differences imply that stakeholder pressure is not uniform but varies in intensity, form, and effectiveness. In the sustainability context, stakeholder pressure functions as an external governance mechanism that complements internal corporate controls. Government pressure arises from environmental regulations, monitoring systems, and enforcement actions that increase the legal and compliance costs of misleading disclosures. Environmental pressure, often driven by NGOs, activists, and media scrutiny, operates through reputational channels by exposing inconsistencies between corporate claims and actual environmental performance.

Consumer pressure reflects market-based demands for environmentally responsible products and corporate behavior. While environmentally conscious consumers may penalize firms once greenwashing is revealed, limited access to reliable information may also incentivize firms to engage in symbolic sustainability communication to enhance brand image. Creditor pressure stems from financial institutions' concerns over environmental risks that may affect firms' creditworthiness and long-term viability. Creditors increasingly integrate environmental considerations into risk assessment, thereby exerting monitoring pressure on borrowing firms.

Stakeholder pressure influences corporate sustainability behavior by shaping the perceived costs and benefits of substantive versus symbolic responses. When stakeholder pressure is credible, consistent, and enforceable, firms are more likely to reduce greenwashing and align disclosures with actual performance. Conversely, fragmented or weak stakeholder pressure may encourage firms to rely on symbolic disclosure strategies to manage legitimacy demands. Accordingly, stakeholder pressure plays a central role in determining whether firms engage in genuine sustainability practices or resort to greenwashing.

Positioning of This Study in Greenwashing Literature

Prior greenwashing research has largely focused on internal corporate governance mechanisms as primary determinants of misleading sustainability disclosures, yet the empirical evidence remains inconsistent and inconclusive, suggesting that internal controls alone cannot fully explain firms' greenwashing behavior. Although recent studies have begun to acknowledge the role of external stakeholder pressure, this literature often treats stakeholder influence as homogeneous or examines individual stakeholders in isolation, thereby overlooking the heterogeneity and potential paradoxical effects of different stakeholder groups. This study addresses these gaps by examining multiple forms of stakeholder pressure simultaneously and explicitly testing their heterogeneous and, in some cases, contradictory effects on corporate greenwashing, offering a more nuanced understanding of how firms strategically respond to legitimacy demands under varying external pressures.

Government Pressure and Greenwashing

Government pressure arises from environmental regulations, monitoring mechanisms, enforcement actions, and potential sanctions imposed by public authorities. From an institutional perspective, government pressure represents the most formalized and coercive form of stakeholder pressure. Strong regulatory oversight increases the expected costs of misleading disclosures by raising the likelihood of detection and punishment. Prior studies suggest that stringent environmental regulations and effective enforcement mechanisms are associated with higher disclosure quality and lower levels of symbolic sustainability reporting (Tang et al., 2023). When regulatory pressure is credible, firms are more likely to align their disclosures with actual environmental performance to avoid legal and reputational consequences. However, in contexts where regulations exist but enforcement is weak, firms may still engage in greenwashing while maintaining formal compliance. Therefore, the effectiveness of government pressure in constraining greenwashing depends on its institutional strength.

H1: Government pressure is negatively associated with corporate greenwashing.

Environmental Pressure and Greenwashing

Environmental pressure originates from environmental non-governmental organizations (ENGOs), activists, media scrutiny, and public environmental campaigns. Unlike government pressure, environmental pressure primarily operates through reputational channels rather than formal sanctions. This form of pressure increases public visibility and raises the reputational costs of environmental misconduct. Environmental stakeholders often play a watchdog role by exposing inconsistencies between corporate environmental claims and actual practices. Prior research indicates that firms facing strong NGO activism and media scrutiny tend to improve transparency and reduce symbolic disclosure strategies (Fabrizi et al., 2023). Under sustained environmental pressure, greenwashing becomes riskier, as inconsistencies are more likely to be detected and publicly criticized. Nevertheless, when environmental pressure is fragmented or episodic, firms may respond strategically by increasing symbolic disclosure rather than implementing substantive environmental changes. This duality underscores the need for empirical testing.

H2: Environmental pressure is negatively associated with corporate greenwashing.

Consumer Pressure and Greenwashing

Consumer pressure reflects the extent to which customers value environmental responsibility and respond to firms' sustainability claims through purchasing decisions and brand evaluations. In consumer-facing industries, environmental reputation plays a critical role in shaping market outcomes. Stakeholder theory suggests that firms operating in markets with environmentally sensitive consumers face stronger incentives to signal sustainability commitment. However, prior studies highlight a paradox: consumer pressure may simultaneously discourage and encourage greenwashing. On the one hand, environmentally conscious consumers may penalize misleading claims once exposed. On the other hand, limited consumer ability to verify environmental performance may incentivize firms to engage in symbolic sustainability communication (Testa et al., 2022). As a result, firms may use greenwashing as a marketing-oriented response to consumer demand for green products, particularly when verification mechanisms are weak.

H3: Consumer pressure is positively associated with corporate greenwashing.

Creditor Pressure and Greenwashing

Creditor pressure arises from banks and financial institutions that incorporate environmental risk considerations into lending decisions. Creditors are primarily concerned with downside risk and long-term firm viability, making them increasingly attentive to environmental liabilities and sustainability risks. From an agency perspective, creditors exert monitoring pressure to reduce information asymmetry and protect their financial interests. Firms facing strong creditor scrutiny are expected to provide more reliable sustainability information and avoid misleading disclosures that could increase perceived risk (Xie et al., 2023). However, compared to equity investors, creditors may rely more heavily on formal disclosures and less on public scrutiny, potentially creating incentives for firms to manage perceptions through symbolic reporting. The net effect of

creditor pressure on greenwashing therefore remains an empirical question.

H4: Creditor pressure is negatively associated with corporate greenwashing.

METHOD

This study employs a quantitative research design using panel data analysis to examine the effect of stakeholder pressure on corporate greenwashing. A unbalanced panel data approach allows for controlling unobserved firm-specific heterogeneity and capturing dynamic variations across firms and time, thereby providing more robust and reliable estimates compared to cross-sectional analysis. The empirical model focuses on the relationship between stakeholder pressure (proxied by government pressure, environmental pressure, consumer pressure, and creditor pressure) and the extent of corporate greenwashing.

The sample consists of publicly listed companies observed over a multi-year period. Firms are selected based on the following criteria: (1) Firms are listed continuously during the 2017-2023; (2) Firms publish annual reports and sustainability or ESG-related disclosures; (3) Firms have complete financial and non-financial data required for variable measurement. The final sample forms an unbalanced/balanced panel 238 observant, which is appropriate for panel regression analysis.

The dependent variable in this study is greenwashing (GW), measured using the approach of Testa et al. (2018) through the difference between the Green Communication Index (GCI) and the Green Practice Index (GPI). GCI represents the extent of corporate sustainability communication, whereas GPI captures actual environmental practices. Both indices are constructed from environmental indicators available in LSEG. The standardized difference between GCI and GPI yields a Discrepancy Index (DI), where positive values indicate a higher tendency toward greenwashing. The use of discrepancy-based greenwashing measurement enables this study to distinguish symbolic disclosure from substantive environmental performance, aligning the empirical design with the legitimacy-based theoretical framework.

Stakeholder pressure is operationalized through four distinct dimensions to capture the heterogeneous mechanisms through which different stakeholder groups influence corporate sustainability disclosure behavior. Each dimension reflects a specific channel of influence that shapes firms' incentives to engage in substantive environmental actions or symbolic disclosure strategies.

- a. Government pressure (X1) captures the coercive regulatory environment faced by firms, reflecting exposure to environmental regulations, monitoring intensity, and policy enforcement. This variable operationalizes the extent to which firms face credible legal and compliance risks associated with misleading environmental disclosures, thereby increasing the expected costs of greenwashing.
- b. Environmental pressure (X2) represents reputational scrutiny exerted by environmental non-governmental organizations, activists, and media attention. This dimension reflects external monitoring through public visibility and issue salience, where firms are exposed to heightened reputational risks if inconsistencies between environmental claims and actual practices are revealed.
- c. Consumer pressure (X3) reflects market-based discipline, capturing the extent to which firms are exposed to environmentally sensitive consumers. Firms operating in consumer-facing industries or with higher public visibility are subject to stronger expectations regarding environmental responsibility, which may simultaneously incentivize substantive improvements and symbolic sustainability communication under conditions of information asymmetry.
- d. Creditor pressure (X4) captures financial monitoring pressure arising from firms' reliance on external debt financing. As creditors increasingly incorporate environmental risks into lending and risk assessment processes, firms face stronger incentives to provide credible sustainability disclosures to reduce perceived risk, although reliance on formal reporting may also create opportunities for symbolic compliance.

By distinguishing these four dimensions, this study operationalizes stakeholder pressure as a multi-channel external governance mechanism, allowing for empirical testing of heterogeneous and

potentially paradoxical effects on corporate greenwashing. To mitigate omitted variable bias, this study includes several control variables commonly used in sustainability and disclosure research: Board Gender, Board Size, Board Independence, Firm Size (natural logarithm of total assets), and Profitability (return on assets).

To test the hypotheses, the following panel regression model is estimated:

$$GW = \alpha + \beta^1 Gov_{it} + \beta^2 Env_{it} + \beta^3 Con_{it} + \beta^4 Cred_{it} + \beta^5 Bdiv_{it} + \beta^6 Bsize_{it} + \beta^7 Bind_{it} + \beta^8 Size_{it} + \beta^9 Roa_{it} + \epsilon$$

where:

- GW = Greenwashing
- α = Constant term
- β = Coefficients of the independent variables
- Gov = Government Pressure
- Env = Environment Pressure
- Con = Consumer Pressure
- Cred = Creditor Pressure
- Bdiv = Board gender diversity
- Bsize = Board size
- Bind = Board independence
- Size = Firm size
- Roa = Return on assets
- ϵ = Error term
- i = Firm
- t = Year

RESULT

4.1 Descriptive Statistics

Table 4.1 presents the descriptive statistics of the research sample, consisting of 238 firm-year observations. The table reports the mean, standard deviation, minimum, and maximum values for all variables used in the empirical analysis.

Table 4.1 Descriptive Statistics of the Research Sample

Variable	Obs	Mean	Std. Dev.	Min	Max
GW	238	0.0366	1.0788	-2.9466	2.9867
Gov	238	0.2815	0.4507	0.0000	1.0000
Env	238	0.6176	0.4870	0.0000	1.0000
Con	238	0.4328	0.4965	0.0000	1.0000
Cred	238	2.6198	4.9931	-17.2400	55.2200
Bdiv	238	0.0958	0.1214	0.0000	0.5000
Bsize	238	6.3445	2.3237	2.0000	15.0000
Bind	238	0.4570	0.1277	0.2857	0.8333
Size	238	22.3043	1.3101	19.5329	25.7396
Roa	238	0.0588	0.0622	-0.0106	0.2260

Source: Data processed in 2025

The dependent variable, greenwashing (GW), has a mean value of 0.0366 with a standard deviation of 1.0788. The wide range between the minimum value of -2.9466 and the maximum value of 2.9867 indicates substantial variation in greenwashing practices across firms and over time. This variation suggests that while some firms exhibit relatively consistent alignment between environmental disclosure and performance, others display a high degree of inconsistency, reflecting stronger tendencies toward greenwashing.

Regarding the main independent variables, government pressure (Gov) shows a mean of 0.2815, with values ranging from 0 to 1. This indicates that approximately 28% of the observations are subject to higher levels of government-related pressure, suggesting uneven regulatory exposure

across firms. Environmental pressure (Env) has a mean of 0.6176, implying that more than half of the sampled firms experience relatively strong environmental scrutiny, potentially from environmental stakeholders such as NGOs or media. Consumer pressure (Con) records a mean of 0.4328, indicating moderate exposure to consumer-related environmental demands. Creditor pressure (Cred) exhibits a mean of 2.6198 with a relatively large standard deviation of 4.9931, reflecting substantial heterogeneity in firms' reliance on debt financing and, consequently, differences in monitoring intensity from creditors.

For the corporate governance variables, board gender diversity (Bdiv) has an average value of 0.0958, indicating that female representation on boards remains relatively low across the sample. Board size (Bsize) has a mean of 6.3445 members, with values ranging from 2 to 15, suggesting notable variation in board structures among firms. Board independence (Bind) shows a mean of 0.4570, indicating that, on average, independent board members constitute approximately 46% of total board membership.

With respect to firm-level control variables, firm size (Size), measured as the natural logarithm of total assets, has a mean of 22.3043, with moderate dispersion across firms. Return on assets (ROA) has a mean of 0.0588, suggesting that sample firms are, on average, profitable, although the presence of negative minimum values indicates that some firms experience financial losses during the observation period. Overall, the descriptive statistics reveal substantial variation across key variables, particularly greenwashing and creditor pressure, which supports the appropriateness of panel data analysis. The absence of extreme multicollinearity and the presence of meaningful dispersion across variables indicate that the dataset is suitable for regression-based empirical testing.

4.2 Model Selection and Diagnostic Tests

To determine the most appropriate panel data estimation technique, this study initially compares pooled ordinary least squares, fixed effects, and random effects models. The Hausman specification test indicates that the random effects model is more appropriate, suggesting that firm-specific effects are not systematically correlated with the explanatory variables. Accordingly, all subsequent analyses are based on the random effects estimator.

Several diagnostic tests are conducted to assess the validity of the regression model. The results indicate that the data do not follow a normal distribution. However, non-normality is not considered a critical concern in large-sample panel data settings, as the estimators remain consistent and asymptotically normal under the central limit theorem. Further diagnostics reveal the presence of autocorrelation, indicating correlation across time within firms. To address this issue, the study applies robust standard errors, which provide consistent inference in the presence of autocorrelation. Tests for heteroskedasticity show no evidence of heteroskedastic variance, suggesting that the residual variance is homoscedastic. In addition, variance inflation factor (VIF) analysis indicates that multicollinearity is not a concern, as all VIF values remain below commonly accepted thresholds. Overall, these diagnostic results support the reliability of the random effects estimation with robust standard errors.

4.3 Regression Result

This study employs a random effects GLS regression model with clustered robust standard errors to address non-normal data distribution and the presence of autocorrelation. The Wald chi-square statistic is significant at the 1% level, indicating that the model is jointly significant and appropriate for explaining variations in corporate greenwashing.

Table 4.2 Regression Result

Variable	Coefficient	Robust Std. Error	z-statistic	p-value
Gov	-0.5325	0.3104	-1.72	0.086 *
Env	-0.6730	0.3042	-2.21	0.027 **
Con	-0.5170	0.3039	-1.70	0.089 *
Cred	0.0091	0.0062	1.46	0.145
Bdiv	0.5405	0.6625	0.82	0.415
Bsize	-0.0054	0.0489	-0.11	0.911

Bind	0.4092	0.7300	0.56	0.575
Size	0.1057	0.1157	0.91	0.361
Roa	3.6147	1.2455	2.90	0.004 ***
Constant	-1.9328	2.5326	-0.76	0.445

Source: Data processed in 2025

The coefficient of government pressure ($\beta = -0.532, p < 0.10$) is negative and marginally significant, indicating that stronger government pressure tends to reduce greenwashing practices. This result suggests that regulatory oversight and government involvement function as an external governance mechanism that constrains symbolic environmental disclosure. Although the effect is not strongly significant at the 5% level, its direction is consistent with legitimacy theory, which posits that firms facing credible regulatory scrutiny are less likely to engage in misleading sustainability reporting.

Environmental pressure shows a negative and statistically significant effect on greenwashing ($\beta = -0.673, p < 0.05$). This finding implies that pressure from environmental stakeholders effectively discourages greenwashing. Reputational monitoring and public exposure appear to increase the costs of symbolic disclosure, thereby incentivizing firms to align sustainability reporting more closely with actual environmental performance. This result supports the view that environmental pressure is a critical deterrent against greenwashing.

Consumer pressure exhibits a negative and marginally significant relationship with greenwashing ($\beta = -0.517, p < 0.10$). This suggests that firms operating under stronger consumer scrutiny are less likely to engage in greenwashing, possibly due to heightened reputational risks and market penalties. Contrary to arguments that consumer pressure may encourage symbolic green marketing, the findings indicate that consumer awareness in the observed context is sufficiently strong to discipline corporate disclosure behavior. This finding contradicts the symbolic response argument in prior studies and suggests a contextual shift in the disciplining role of consumers.

Creditor pressure, proxied by leverage, does not have a statistically significant effect on greenwashing ($p > 0.10$). This result indicates that creditors may prioritize financial performance and risk indicators over the credibility of environmental disclosures. The absence of a significant effect suggests that creditor monitoring may be insufficient to directly constrain symbolic sustainability practices, particularly when environmental risks are not fully integrated into lending decisions.

Among the control variables, profitability (Roa) shows a positive and statistically significant effect on greenwashing ($\beta = 3.615, p < 0.01$). This finding implies that more profitable firms are more likely to engage in greenwashing, potentially due to greater visibility and stronger incentives to maintain a favorable public image. Other governance-related controls, including board gender diversity, board size, and board independence, do not exhibit significant effects, indicating that external stakeholder pressure may play a more prominent role than internal governance mechanisms in shaping greenwashing behavior.

The high rho value ($\rho = 0.865$) indicates that a substantial proportion of variance in greenwashing is attributable to firm-specific effects, justifying the use of panel data methods. Overall, the results highlight the importance of external stakeholder pressure, particularly government and environmental, in mitigating greenwashing practices.

DISCUSSION

This study examines the effect of stakeholder pressure on corporate greenwashing by adopting legitimacy theory and stakeholder theory as its primary theoretical lenses. Using a random-effects panel regression model with cluster-robust standard errors, the findings provide nuanced evidence on how different stakeholder groups influence firms' propensity to engage in greenwashing. Overall, the results suggest that stakeholder pressure does not operate uniformly; instead, its effectiveness depends on the source, credibility, and enforcement mechanism of the pressure.

Government Pressure and Greenwashing

The empirical results indicate that government pressure has a negative and statistically significant

effect at the 10% level on greenwashing, suggesting that stronger regulatory oversight is associated with lower levels of symbolic sustainability reporting. This finding aligns with legitimacy theory, which posits that coercive institutional forces increase the costs of symbolic compliance and reduce firms' incentives to engage in misleading environmental disclosures (Dowling & Pfeffer, 1975). From a stakeholder theory perspective, governments possess high levels of power and legitimacy, enabling them to impose formal sanctions that motivate firms to adopt more substantive environmental practices (Y. Chen et al., 2023). However, the relatively weaker level of statistical significance implies that regulatory pressure is not uniformly effective across firms, particularly in emerging market contexts where enforcement intensity and regulatory credibility may vary, allowing some firms to maintain symbolic compliance despite formal regulation.

Environmental Pressure and Greenwashing

Environmental pressure exhibits a negative and statistically significant relationship with greenwashing at the 5% level, underscoring the critical role of environmental stakeholders in constraining symbolic sustainability practices. This result strongly supports legitimacy theory, which emphasizes the importance of public scrutiny and reputational risk in shaping corporate behavior. Environmental actors such as NGOs and media organizations expose discrepancies between firms' environmental claims and actual performance, making greenwashing a high-risk strategy that threatens organizational legitimacy (Liu et al., 2022). Within the stakeholder theory framework, although environmental stakeholders typically lack formal coercive power, their moral legitimacy and urgency enhance their salience through the ability to mobilize public opinion and influence media narratives (Mitchell et al., 1997). Consistent with prior research, this finding suggests that sustained environmental activism and scrutiny improve disclosure credibility and discourage symbolic reporting (So et al., 2021).

Consumer Pressure and Greenwashing

Consumer pressure is found to have a negative and marginally significant effect at the 10% level on greenwashing, indicating that consumers play a conditional role in constraining misleading sustainability disclosures. From a legitimacy perspective, consumers constitute a key audience whose perceptions directly affect firms' market legitimacy and revenue streams, incentivizing companies to maintain credible sustainability claims to avoid reputational backlash. Stakeholder theory further explains this effect by highlighting that, despite limited monitoring capacity, environmentally conscious consumers can increase the perceived costs of greenwashing through market responses and the amplification of dissatisfaction via social media and public campaigns (Lyon & Montgomery, 2015). Nevertheless, the weaker statistical significance suggests that consumer pressure alone may be insufficient to fully deter greenwashing, as its effectiveness depends on information transparency and media visibility, consistent with prior evidence on the conditional influence of consumer-driven sustainability pressure (Testa et al., 2022).

Creditor Pressure and Greenwashing

Contrary to theoretical expectations, creditor pressure does not exhibit a statistically significant effect on greenwashing, suggesting that creditors are not effective monitors of sustainability disclosure quality in the context examined. From a stakeholder theory perspective, creditors primarily prioritize downside financial risk and debt repayment capacity, rendering reputational and legitimacy concerns secondary. Although environmental risks may affect long-term firm value, creditors often rely on formal disclosures and financial indicators that can be subject to symbolic manipulation. Legitimacy theory further explains this outcome by positing that creditors are less sensitive to symbolic legitimacy than governments or environmental stakeholders and rarely impose direct sanctions for misleading sustainability narratives unless such practices materially impair financial performance. This finding is consistent with prior research indicating the limited role of creditor monitoring in constraining opportunistic non-financial disclosure (J. J. Chen et al., 2020).

Theoretical Implications of Heterogeneous Stakeholder Pressure

The findings of this study reinforce the conceptualization of greenwashing as a strategic legitimacy response rather than merely a byproduct of weak internal governance. Consistent with legitimacy theory, firms selectively engage in symbolic sustainability disclosure when external pressures threaten organizational legitimacy but do not impose sufficiently credible or enforceable constraints. The heterogeneous effects observed across stakeholder groups underscore that legitimacy pressures vary in form and effectiveness, shaping firms' strategic responses in distinct ways. Government and environmental pressures, which entail either coercive enforcement or heightened reputational risk, are more effective in discouraging greenwashing, while consumer and creditor pressures exert conditional or limited influence. From a stakeholder theory perspective, these results highlight that stakeholder salience is not uniform; stakeholders differ in their combinations of power, legitimacy, and urgency, resulting in divergent capacities to constrain symbolic behavior. Collectively, the evidence suggests that greenwashing persists where legitimacy can be managed symbolically and is curtailed when stakeholder pressure credibly increases the costs of impression management relative to substantive environmental action.

CONCLUSION

This study investigates the effect of stakeholder pressure on corporate greenwashing through the lenses of legitimacy theory and stakeholder theory, employing a random-effects panel data approach. This study contributes to greenwashing literature by empirically demonstrating that stakeholder pressure operates as a heterogeneous institutional force that may both constrain and enable symbolic sustainability practices, thereby repositioning greenwashing as a strategic legitimacy response rather than a mere compliance failure. The findings reveal that stakeholder pressure is not homogeneous but exerts differentiated effects depending on stakeholder type. Government pressure and environmental pressure significantly reduce greenwashing, indicating that coercive regulation and reputational scrutiny function as effective external governance mechanisms. Consumer pressure also shows a constraining effect, although its influence appears more conditional and context-dependent. In contrast, creditor pressure does not have a significant impact on greenwashing, suggesting that financial stakeholders may not yet place sufficient emphasis on the credibility of environmental disclosures compared to other stakeholder groups. These results contribute to legitimacy theory by illustrating how firms strategically navigate between substantive and symbolic responses to varying legitimacy threats, and extend stakeholder theory by empirically demonstrating differences in stakeholder salience that shape sustainability disclosure strategies. From a practical standpoint, the findings underscore the importance of strengthening regulatory enforcement and supporting independent environmental monitoring institutions to curb greenwashing. Policymakers should move beyond disclosure-based regulation by enhancing verification and accountability mechanisms, while improving access to reliable environmental information for consumers and creditors to reduce information asymmetry. Overall, the study highlights that effective sustainability governance requires a multi-stakeholder approach, in which diverse external pressures jointly incentivize firms to move beyond greenwashing toward genuine environmental accountability.

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